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ART 34 AMDT

22

CLAIMS

1. A chromatographic medium, the medium comprising thioether ligands bound to a solid cross-linked polymer matrix; wherein the polymer is organic; and wherein the medium is hydrophilic.
2. A medium according to claim 1, wherein the thioether ligands comprises monothioether ligands.
3. A medium according to claim 1 or claim 2, wherein the polymer comprises methacrylate moieties, styrene moieties, poly(ethylene glycol) moieties or any combination or mixture thereof.
4. A medium according to any preceding claim, wherein the ligands are bound to the polymer matrix through a branched or unbranched alkyl, aryl, aralkyl, ether or ester group or combination thereof, optionally substituted, especially by hydroxyl.
5. A medium according to any preceding claim, wherein the sulphur atom of the thioether group is substituted by an alkyl group of 2 to 4 carbon atoms, optionally substituted, especially by hydroxyl.
6. A medium according to any preceding claim, in the form of a gel or a porous solid.
7. A composite chromatographic medium, the composite comprising a porous support, the pores of which contain a medium according to any preceding claim.
8. A method of manufacturing a medium according to any of claims 1 to 6, the method comprising reacting a functionalised thioether monomer with a hydrophilic monomer in the presence of a cross-linking agent.
9. A method of manufacturing a medium according to any of claims 1 to 6, the method comprising reacting a thiol with a functionalised polymer.

REPLACED BY  
ART 34 AMOT

10. A process for the separation of components from solution, the process comprising passing said solution over a medium according to any of claims 1 to 7.

5 11. A process according to claim 10, wherein the solution comprises one or more PGM.

12. A process according to claim 11, wherein the solution comprises Pd; and wherein said Pd is retained on the medium.

10

13. A process according to any of claims 10 to 12, wherein the solution comprises Pd in admixture with two or more other metals; and wherein the medium retains the Pd whilst chromatographically separating the two or more other metals.

15 14. A process according to claim 13, wherein the two or more other metals comprise PGM.

15. A process according to any of claims 12 to 14, wherein the retained Pd is recovered by elution with ammonia or a nitrogen-containing eluant.